

**THE NIGERIAN RICE ECONOMY IN A COMPETITIVE WORLD:
CONSTRAINTS, OPPORTUNITIES AND STRATEGIC CHOICES**

End of project technical report

Submitted to USAID

By

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1. Introduction

The present report is the end of term technical report for the USAID funded project ‘The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices’ – or rice sub-sector review in short. The main purpose of the present project was to review the rice sub-sector and draw up a sound and economically viable strategy for its development.

The present project was ambitious, had a modest budget (US\$ 300,000) and was originally foreseen to last two years (October 2000 – September 2002). However, several factors outlined in the technical progress reports (see Annex 1 – a copy of each will accompany this report) have extended the project activities with about a year. These factors included several delays in the implementation of project activities – in part due to the delayed start, to unforeseen factors and to the overall complexity of doing business in Nigeria – particularly when having the two leading project scientists based in Bouake. The unfortunate military events in Cote d'Ivoire in 2002 hampered the operations of WARDA – and implied further delays and subsequently has led to the departure of one of the two leading project scientists.

The present project largely achieved its objective – although this implied an in-kind contribution of the WARDA lead scientists largely in excess of their originally foreseen contributions. Based on the completion of the project, stakeholders in the Nigerian rice economy – including WARDA and USAID - are now better placed to ensure its successful development. Indeed, the present project has shown substantial scope for the development of the Nigerian rice sub-sector and the need for numerous and coordinated follow-up activities. WARDA has an important role to play in these follow up activities and this calls for WARDA's continued and close involvement – preferably in the form of follow-up projects and corresponding project-funded WARDA scientists on the ground.

The report highlights the main features and outcomes of the project. The more detailed findings of the project are reported in the numerous project technical reports (see Annex 2 – a copy of each will accompany this report) – and reference to these will be made accordingly. The remainder of the present report first recalls the main elements from the project document (project goal, objectives, outputs and activities); summarizes project implementation and outcomes and ends with a conclusion.

2. Original project outline

2.1. Project goal

The ultimate goal of the project is to contribute to the equitable and sustainable development of the Nigerian economy at large, and the Nigerian rice economy in particular. Such development will improve the welfare of rice producers and consumers in Nigeria and strengthen Nigeria's food security. To achieve such development the project's specific goal is the formulation of a sound and economically viable strategy for the Nigerian rice economy.

2.2. Project – research component: objectives, activities and outputs

Objectives:

1. To provide an up to date analysis of the Nigerian rice economy, i.e. to describe and document and analyze the major trends and underlying constraints, their causes and their effects;
2. To identify opportunities for development of the Nigerian rice economy, including the identification of possible solutions for the major constraints and windows of opportunity;

Activities:

- *Stocktaking*: Review of existing information and assessment of information needs. This includes review of literature (published and grey) and expert consultation.
- *Institutional and policy review*: Encompasses (i) a review of the institutional and policy environment affecting the performance of the rice economy; and (ii) the identification of promising policy adjustments.
- *Informal survey & sites selection*: Informal survey using participatory appraisal (PA) techniques to identify key issues and key sites for subsequent in-depth research.
- *Data collection*: Formal surveys in relation to rice production (farming systems), rice consumption and rice marketing (including processing and distribution) in selected areas.
- *Technology screening*: Assessment of the performance of best-bet rice production technologies (improved varieties; improved crop management) in representative environments.
- *Data analysis*: Analysis of primary and secondary data.
- *Report writing*: This encompasses (i) write-up of interim reports; and (ii) write-up of final report describing and analyzing the Nigerian rice economy and identifying various opportunities for its development.

Outputs:

1. A report describing and analyzing the Nigerian rice economy and identifying various opportunities for its development. In particular, the report will:
 - establish the major underlying constraints for developing the rice economy, their causes and their effects including the consumption side, production side, rice marketing system and enabling environment;
 - identify potential technological solutions for major constraints and windows of opportunity in the Nigerian rice economy, including best-bet production technologies (improved varieties; improved crop management) to reduce production costs and enhance the competitiveness of Nigerian rice farmers;
 - explore and recommend policy adjustments to make rice production more competitive and remunerative, while securing rice availability at an affordable price and maintaining integration in the world economy.

2.3. Project - outreach component: objectives, activities and outputs

Objectives:

1. To develop a strategic plan for the development of the Nigerian rice economy within a competitive world.
2. To lay the groundwork for subsequent implementation of the strategic plan.

Activities:

- *Stakeholder identification:* Preliminary identification of main stakeholders in the Nigerian rice economy at federal and state levels.
- *First stakeholders' workshop:* Preliminary meeting to consult stakeholders in relation to constraints and research needs.
- *Second stakeholders' workshop:* Seminar to present and discuss preliminary findings and strategy outlines.
- *Third stakeholders' workshop:* Seminar to present and discuss research results and draft strategic plan. Seminar will also identify follow-up activities, with corresponding time frame and funding strategy, and explore an institutional framework to implement the strategy.
- *Strategy development:* This encompasses: (i) the elaboration of a strategic plan for the development of the Nigerian rice economy; and (ii) the elaboration of a proposal for an appropriate institutional framework to implement the strategy and monitor the rice economy.
- *Concluding meeting:* Formal gathering to present strategic plan to the national, regional and international audience.

Outputs:

1. Three consultation workshops to plan research, to present results and to discuss options with stakeholders (farmers, private agents, policy makers, investors).
2. A strategic plan for the development of the Nigerian rice economy. This includes an outline of the way forward and prioritization of activities, identification of entry points (by theme, geographic area/state, level and time). The collaborative and institutional setting of the project will help ensure the necessary ownership of the strategy by the stakeholders.
3. A proposal for an appropriate institutional framework to implement the strategy and monitor the rice economy, including a funding strategy for priority areas. This will include making the necessary preparations to allow for implementation of the strategic plan after completion of the current project and ensuring the ownership of the strategic plan with major stakeholders. Several issues might not be fully resolved within the scope of the current project and may need additional research or further fine-tuning. The proposal will identify such issues and design the proper strategy to address them (including partners and funding mechanism).

3. Project implementation and outcomes

The project was completed and achieved its objectives and delivered all of its four outputs – albeit that the implementation of certain project activities has been somewhat delayed or changed due to circumstances which were unforeseen during the planning stage. The project implementation is reported here along the two main components planned in the project proposal and their corresponding activities.

3.1. Research component

The project achieved both of its intended research objectives providing an up to date analysis of the Nigerian rice economy and identifying opportunities for its development. The present section documents the research activities as implemented and outputs generated – highlighting some of the adaptations to the original plan as appropriate.

3.1.1. Stocktaking, institutional and policy review

This was a major component of the project and encompassed most of the first year of project implementation. The review shows that although a lot of information is available, it is typically difficult to access – particularly in view of the size and institutional organization of Nigeria. The review also highlighted that a comprehensive overview of the rice economy was still missing – both in terms of its temporal and spatial dimensions. Though time-demanding, this stocktaking was deemed crucial to determine the information needs for developing a strategy. The review also highlights that the major part of the available information concerns production related issues followed by documents on policy. It shows that down-stream operations of the rice food chain have received less attention in the past years. This is in line with the rice development strategy implemented during the last decades focusing mainly on production increase and giving less attention to rice processing, marketing and consumers behaviour. It is also important to note that most of the documents refer to information and data that have been collected during the rice import ban period (prior to 1995) and that limited information are available on the impact on the Nigerian rice sub-sector of the lifting the ban.

The review has been documented in the project report :

Akpokodje, G., Lançon, F., and Erenstein, O., 2001. Nigeria's rice economy: state of the art. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Bouake: WARDA. ii-55 pp.

3.1.2. Informal survey, sites selection and data collection

The review of existing information was more complex and time-consuming than originally foreseen. Indeed, Nigeria is characterized by the multiplicity of research and development institutions involved in the analysis and assessment of agricultural development. Therefore it was deemed necessary and more cost-effective to devote more time to collect existing information before initiating the collection of primary data. The rationale being to focus survey objectives on

prevailing information gaps and to avoid duplication with recent or on-going research related to the rice sub-sector. As a result, primary data collection originally foreseen for 2001 was delayed to the first half of 2002.

The primary data collection aimed at collecting a selected number of variables, on changes in the rice sector in the last few years, in a limited period of time in order to feed back the results into the formulation of the strategy for rice development in Nigeria. It has been decided to focus on producers and processors (rice millers) in order to capture performance at, both, production and marketing level (Quarterly progress report 2002 – Q1). Although traders are also playing a key role in linking local supply to demand, it has been preferred to limit investigation to processors to take into account time constraints, and because, processors play a critical role in the management of rice quality along the marketing chain. In the end four surveys were conducted:

1. Formal producer survey of 252 rice producing households in 5 states. Includes a village survey with key informants.
2. Formal processor survey of 81 rice millers.
3. Formal consumer/retailer survey of 480 consumers and 48 rice retailers.
4. Informal irrigated rice survey of 6 irrigated rice schemes.

The site selection for the primary data collection were based on the available secondary data, expert consultation and informal field visits (also see quarterly progress report 2002 – Q1). The details of the actual site selection for each individual study have been outlined in the methodology section of the corresponding reports.

3.1.3. *Technology screening*

In the project document reference is made to technology screening as one of the project's research activities. However, as outlined in the mid-term reporting (Annual report 2001, p. 5-8) it was decided that the resources for such screening could be better used to support other project activities. The reasons for this proposition were (see Annual report 2001, p. 5-8 for an elaboration of each):

1. On-going technology screening under other complementary projects;
2. Dire need to update information on Nigerian rice economy;
3. Complexity of handling such an activity under current institutional set-up.

3.1.4. *Data analysis and report writing*

Data collected in each survey were analyzed and documented in separate project reports:

Erenstein, O., Lançon, F., Akande, S. O., Titilola, S. O., Akpokodje, G., and Ogundele, O. O., 2003. Rice production in Nigeria: A survey. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA. iv-77 pp.

Lançon, F., Erenstein, O., Akande, S. O., Titilola, S. O., Akpokodje, G., and Ogundele, O. O., 2003b. Rice processing in Nigeria : A survey. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA. ii-41 pp.

- Lançon, F., Erenstein, O., Akande, S. O., Titilola, S. O., Akpokodje, G., and Ogundele, O. O., 2003a. Imported Rice retailing and Purchasing in Nigeria: A survey. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA. ii-14 pp.
- Kebbeh, M., Haefele, S., and Fagade, S. O., 2003. Challenges and opportunities for improving irrigated rice productivity in Nigeria. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA. ii-24 pp.

In addition of the survey studies, a rice market integration study was subcontracted to NISER based on data on prices collected during the 1st year of the project. The study is documented in a separate project report:

- Akande, S. O. and Akpokodje, G., 2003. Rice Prices And Market Integration In Selected Areas In Nigeria. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Ibadan: NISER. ii-20 pp.

3.1.5. *Research outputs*

The research component of the project has generated several technical reports documenting the findings (Akande and Akpokodje, 2003; Akpokodje et al., 2001; Erenstein et al., 2003; Kebbeh et al., 2003; Lançon et al., 2003a; Lançon et al., 2003b).¹

The research findings were subsequently synthesized in and used as base for the rice sector revitalization strategy and the accompanying operationalization report :

- WARDA, 2003. Strategy for rice sector revitalization in Nigeria. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA - The Africa Rice Centre. iii-15 pp.

- Erenstein, O., Lançon, F., Osiname, O., and Kebbeh, M., 2004. Operationalising the strategic framework for rice sector revitalization in Nigeria. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA - The Africa Rice Centre. ii-38 pp.

Taken together, the project reports comprehensively describe and analyze the Nigerian rice economy and identify various opportunities for its development.

3.2. *Outreach component*

The project achieved both of its intended outreach objectives providing a strategic plan for the development of the Nigerian rice economy and having laid the groundwork for subsequent implementation of the strategic plan. The present section documents the outreach activities as implemented and outputs generated.

¹ The main conclusions of the individual studies are also synthesized in (Erenstein and Lançon, 2003).
The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices
End of project report

3.2.1. Identification and consultation of partners and stakeholders

A significant share of the first year was devoted to the identification and consultation of potential partners and stakeholders (Annual progress report 2001, p. 8-11). Consultation mechanisms included visits of stakeholders in their own environment and bringing stakeholders together in workshops (see next section). The consulted stakeholders that are organized are dominated by formal public institutions due to the limited development of non-public organizations that are representative of rice producers, processors, traders and consumers. The consolidation of local producers associations into larger and more representative organizations has just been initiated after the return to democracy but were still consulted and the federal association for instance participated in the final workshop.

3.2.2. Stakeholder workshops

Of the three stakeholders' workshops envisaged, two were implemented and documented in project reports:

NISER and WARDA, 2001. Report of the Stakeholders Workshop, 'The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices', November 8-9 2001, Ibadan. Project report. Bouake: WARDA. ii-16 pp.

Erenstein, O. and Lançon, F., 2003. Report of the Final Technical Workshop, 'The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices', August 20-21 2003, Ibadan. Project report. Abidjan: WARDA - The Africa Rice Centre. ii-24 pp.

As outlined in the mid-term progress report (Annual progress report 2001, p. 13), the originally proposed second stakeholder workshop had become superfluous and was not implemented. Indeed, the November 2001 stakeholder workshop and preceding expert consultations throughout the year combined the purpose of the originally proposed first and second stakeholder workshop.

3.2.3. Strategy development and presentation

Based on the outcome of the stakeholder consultation and targeted research activities a strategic plan for the development of the Nigerian rice economy was elaborated (WARDA, 2003). The strategy was further operationalised in a companion document (Erenstein et al., 2004).

The strategy was presented and discussed during two policy meetings in Abuja. The first in March 2003 allowed for interaction with the Minister of Agriculture and other senior officials to discuss elements of the proposed strategy under development. The second on 25 August 2003 represented the concluding meeting at the Ministry of Agriculture in Abuja – a formal gathering to officially present strategic plan to the Minister of Agriculture and selected policy makers.

3.2.4. Outreach outputs

The outreach component of the project generated the following verifiable outputs:

1. Two workshops (Erenstein and Lançon, 2003; NISER and WARDA, 2001) and two policy meetings in Abuja (March and August 2003).
2. A documented rice sector revitalization strategy (WARDA, 2003);

WARDA, 2003. Strategy for rice sector revitalization in Nigeria. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA - The Africa Rice Centre. iii-15 pp.

3. A detailed proposal to operationalize the rice sector revitalization strategy, including institutional partners (Erenstein et al., 2004).

Erenstein, O., Lançon, F., Osiname, O., and Kebbeh, M., 2004. Operationalising the strategic framework for rice sector revitalization in Nigeria. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA - The Africa Rice Centre. ii-38 pp.

4. Conclusion

The project has shown that there are considerable opportunities to revitalize the Nigerian rice sector (Erenstein et al., 2004; WARDA, 2003). The current level of protection of the domestic rice sector provides an opportunity for such development. However, such a protection comes at a considerable social cost and therefore should be seen as a temporary transient measure. The only sustainable and socially acceptable way forward is to enhance the competitiveness of local rice against imported rice – both in terms of quality and price. This calls for improving quality management and increasing efficiency along the entire marketing chain. The present project has outlined a number of activities to tackle these challenges (Erenstein et al., 2004). However, their success will depend on the mobilization of sufficient resources (human, financial) and political will for their implementation. It also implies changing business as usual and calls for some innovative approaches and partnerships and an overall enabling environment for such an investment and adjustment to occur.

One important departure from business-as-usual is the need to focus on consumer demands. Indeed, traditionally the domain of R&D intervention has been on productivity increases. Whereas such improvements are needed to enhance the price competitiveness of Nigerian rice, a complementary and equally important need is to improve the quality competitiveness of Nigerian rice. There is a genuine need to find the right balance between price and quality – without falling back in traditional patterns. Only then will the Nigerian rice sector be able to compete with imported rice and will a structural increase in the market share for domestic rice be realized – allowing Nigeria to approach its quest for self-sufficiency without imposing a high social cost.

In sum, stakeholders in the Nigerian rice economy – including WARDA and USAID - are now better placed to ensure its successful development. Indeed, the present project has shown substantial scope for the development of the Nigerian rice sub-sector and the need for numerous and coordinated follow-up activities. WARDA has an important role to play in these follow up activities and this calls for WARDA's continued and close involvement – preferably in the form of follow-up projects and corresponding project-funded WARDA scientists on the ground.

Annex 1 Project technical progress reports

#	Title	Period covered	# pages	Date
1	1st intermediary report	November 2000 – May 2001	39	May 2001
2	2nd intermediary report	June – September 2001	74	Sept. 2001
3	Annual report for the year 2001	Jan. – Dec. 2001	17	Jan. 2002
4	Quarterly report	January - March 2002	13	April 2002
5	Quarterly report	April- June 2002	5	July 2002
6	Quarterly reports	July – September 2002 October-December 2002	6	Jan. 2003
7	Quarterly report	January - March 2003	4	April 2003
8	Quarterly report	April- June 2003	3	July 2003
9	End of project technical report	Nov. 2000 – Dec. 2003	10	Feb. 2004

Annex 2 Project technical reports

- Akande, S. O. and Akpokodje, G., 2003. Rice Prices And Market Integration In Selected Areas In Nigeria. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Ibadan: NISER. ii-20 pp.
- Akpokodje, G., Lançon, F., and Erenstein, O., 2001. Nigeria's rice economy: state of the art. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Bouake: WARDA. ii-55 pp.
- Erenstein, O. and Lançon, F., 2003. Report of the Final Technical Workshop, 'The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices', August 20-21 2003, Ibadan. Project report. Abidjan: WARDA - The Africa Rice Centre. ii-24 pp.
- Erenstein, O., Lançon, F., Akande, S. O., Titilola, S. O., Akpokodje, G., and Ogundele, O. O., 2003. Rice production in Nigeria: A survey. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA. iv-77 pp.
- Erenstein, O., Lançon, F., Osiname, O., and Kebbeh, M., 2004. Operationalising the strategic framework for rice sector revitalisation in Nigeria. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA - The Africa Rice Centre. ii-35 pp.
- Kebbeh, M., Haefele, S., and Fagade, S. O., 2003. Challenges and opportunities for improving irrigated rice productivity in Nigeria. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA. ii-24 pp.
- Lançon, F., Erenstein, O., Akande, S. O., Titilola, S. O., Akpokodje, G., and Ogundele, O. O., 2003a. Imported Rice retailing and Purchasing in Nigeria: A survey. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA. ii-14 pp.
- Lançon, F., Erenstein, O., Akande, S. O., Titilola, S. O., Akpokodje, G., and Ogundele, O. O., 2003b. Rice processing in Nigeria : A survey. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA. ii-41 pp.
- NISER and WARDA, 2001. Report of the Stakeholders Workshop, 'The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices', November 8-9 2001, Ibadan. Project report. Bouake: WARDA. ii-16 pp.
- WARDA, 2003. Strategy for rice sector revitalization in Nigeria. Project report - The Nigerian Rice Economy In A Competitive World: Constraints, Opportunities And Strategic Choices. Abidjan: WARDA - The Africa Rice Centre. iii-15 pp.